ABSTRACT OF THE DISCLOSURE

An agricultural and horticultural plant growth zeolite-based composition containing a particular zeolitic (*i.e.*, zeolite-containing) material, termed "Jordanite," is disclosed. This composition exhibits a collection of outstanding advantageous properties in agricultural and horticultural applications. Jordanite, which is found in a particular area of Jordan, comprises primarily phillipsite as the zeolite, optionally in conjunction with palagonite. Jordanite provides surprisingly better results as compared to when other zeolite-based soil amendment compositions, even when it is used as the mined material that has been only subject to a grinding or crushing operation to a desired mesh size. As mined, Jordanite contains very low levels of undesired Na^+ ions. It can, therefore, be used without being subjected to a washing operation to remove these ions. Jordanite also possesses a very high CEC. These characterisitics, and others, make Jordanite uniquely suitable to use in any agricultural or horticultural operation.